

REMARKS/ARGUMENTS:

Claims 19-21 are amended. New claims 31-33 are added. Support for the amendment to claims 19-21 and new claim 31 can be found at paragraph [0013] of Applicant's published application (U.S. Patent Publication No. 20040253219). Support for new claim 32 can be found at paragraph [0038] of Applicant's published application. Support for new claim 33 can be found in original claim 6. Claims 1-9, 19-21, and 31-33 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

The present invention relates to a method for treatment of tissue, for example, collagenous tissue, where a deleterious mechanical loading environment contributes to the degradation of the tissue. In one embodiment, the present invention relates to a method for treatment of degenerated intervertebral discs to improve fatigue resistance, and to non-toxic crosslinking reagents that are effective fatigue inhibitors. In a second embodiment, the present invention relates to methods and devices for the treatment of intervertebral disc and surrounding tissues to resist the ongoing deforming forces and curve progression in scoliosis. In a third embodiment, the present invention relates to methods and devices for improving the environment for biological activity in the central region of the disc by increasing the permeability or more specifically, the diffusivity of the outer region of the disc. (Applicant's published application, at paragraph [0003]).

CLAIM REJECTIONS UNDER 35 U.S.C. § 102:

Claims 19-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Slivka et al. (U.S. Patent No. 6,812,211). Applicant respectfully traverses this rejection. Claim 19, as amended, is as follows:

A method of treating a patient in which a degraded, injured or failed intervertebral disc has been repaired or regenerated, comprising:
increasing the permeability of the outer region of an intervertebral disc, the annulus fibrosus, wherein the fluid flux to and from the central region, or nucleus pulposus, of the intervertebral disc is improved by contacting at least a portion of a collagenous tissue within the disc with an effective amount of a crosslinking reagent.

Applicant respectfully submits that Slivka cannot anticipate or render claim 19 obvious, because Slivka fails to teach or suggest a "method of treating a patient in which a degraded, injured or failed intervertebral disc has been repaired or regenerated."

It is an aspect of the present invention that an intervertebral disc that has been repaired or regenerated can obtain an increase in permeability of the outer region of the disc by contacting at least a portion of a collagenous tissue within the disc with an effective amount of a crosslinking reagent. Therefore, in the embodiment of claim 19, the treatment method is directed to repaired or regenerated intervertebral discs as an aid, or adjunct therapy, to other reparative or regenerative therapies. In contrast, Slivka fails to teach or suggest treating a patient in which a repair or a regeneration of an intervertebral disc has already taken place. Thus, the present invention is neither taught nor suggested by Slivka.

In light of the foregoing, Applicant respectfully submits that Slivka cannot anticipate or render claim 19 obvious, because Slivka fails to teach or suggest each and every claim limitation. Claims 20 and 21 similarly are directed to a "method of treating a patient in which a degraded, injured or failed intervertebral disc has been repaired or regenerated," and are therefore, patentable over Slivka for reasons discussed above. Withdrawal of this rejection is thus respectfully requested.

Appl. No. 10/786,861
Amdt. Dated February 15, 2008
Reply to Office Action of January 22, 2008

Attorney Docket No. 89188.0058
Customer No.: 26021

DOUBLE PATENTING REJECTIONS:

Claims 19-21 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 24-29 of copending Application No. 11/230,671. In response, Applicant files concurrently herewith a terminal disclaimer in compliance with 37 CFR 1.321(c). Withdrawal of this rejection is thus respectfully requested.

ALLOWABLE SUBJECT MATTER:

Claims 1-9 are allowed.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance.

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If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

HOGAN & HARTSON L.L.P.

Date: February 15, 2008

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